

In the Claims:

Please amend the claims as follows:

1-22 (cancelled)

23. (currently amended) A method for the preparation of doped oxide material from a base material and a dopant, the base material comprising an inorganic or organic compound including silicon or germanium and the dopant comprising a rare earth metal, the method comprising:

bringing ~~substantially all reactants~~ base material and the dopant into a vaporous form in a gas phase by heating the ~~reactants~~ base material and the dopant;

mixing the ~~reactants~~ vaporous base material and dopant together to create a gas flow; and

bringing the gas flow at a sufficiently high temperature ~~in to a~~ into contact with at least one oxidant gas ~~in order~~ to form particles comprising an oxide material in a reaction so that ~~all the components of the reactants reach~~ a supersaturated state of the base material, dopant and at least one oxidant gas is reached substantially simultaneously and there is no time in the reaction to reach a chemical phase equilibrium.

24. (cancelled)

25. (cancelled)

26. (currently amended) The method according to claim 25, wherein ~~said fast oxidation of reactants is achieved by directing~~ one or more jets of the at least one oxidant gas are directed ~~oxidative gases to the gas flow of the reactants, preferably jets formed of oxygen and/or carbon dioxide.~~

27. (cancelled)

28. (currently amended) The method according to claim 26, wherein ~~the formation of oxide particles is intensified by directing~~ said one or more jets of the at least one oxidant gas are ~~oxidative gases to the gas flow of reactants as colder than said gas flow.~~

29. (currently amended) The method according to claim 23, wherein ~~the fast oxidation of reactants into oxide particles is achieved and/or it is intensified by expanding~~ the gas flow of ~~reactants~~ is expanded adiabatically.

30. (currently amended) The method according to claim 29, wherein the gas flow of ~~reactants~~ is directed through the Laval a de Laval nozzle ~~or the like.~~

31. (cancelled)

32. (currently amended) The method according to claim ~~31~~ 23, wherein the ~~glass material comprises~~ the base material comprises silicon tetrachloride, ~~or~~ germanium tetrachloride, TEOS (tetraethylortosilicate), ~~or GEOS (tetraethoxygermanium)~~ tetraethylortosilicate, or

tetraethoxygermanium.

33. (currently amended) The method according to claim 23, wherein said ~~oxide material~~ is ~~glass material, as whose dopant is used~~ comprises erbium, neodymium, or other rare earth metal, ~~aluminium, phosphorus, borium and/or fluorine.~~

34. (currently amended) The method according to claim 23, wherein the ~~oxide~~ particles are formed in a reactor ~~in which the~~ at a temperature is ~~approximately in a range~~ between approximately 1000 and 2000°C.

35. (new) The method according to claim 23, wherein the dopant comprises aluminium, phosphorus, borium and/or fluorine.

36. (new) The method according to claim 25, wherein said one or more jets of the at least one oxidant gas comprise jets formed of oxygen and/or carbon dioxide.

37. (new) The method according to claim 25, wherein the dopant comprises a liquid solution.

38. (new) A method for preparing doped oxide material from reactants, the method comprising:

bringing the reactants into a vaporous form by heating the reactants, the reactants comprising a base material and a dopant, the base material comprising an inorganic or organic

compound of silicon or germanium and the dopant comprising a liquid solution of a rare earth metal;

mixing the reactants together to create a gas flow having an advancing direction; and  
directing jets of at least one oxidative gas to the gas flow at a sufficiently high temperature in a reactor in order to form substantially simultaneously oxidized silicon or germanium and oxidized rare earth metal, said jets being arranged to start from a wall of the reactor and disposed at opposite sides of the reactor, said jets having a direction which is transverse in respect of the advancing direction of the gas flow, the jets from opposite sides of the gas flow being situated in the advancing direction of the gas flow so that they are not directly opposite to each other.

39. (new) The method according to claim 38, wherein the oxidative gas is oxygen or carbon dioxide.

40. (new) The method according to claim 38, wherein the oxidative gas is colder than said gas flow.

41. (new) The method according to claim 38, wherein the base material comprises silicon tetrachloride, germanium tetrachloride, tetraethylortosilicate, or tetraethoxygermanium.

42. (new) The method according to claim 38, wherein the dopant comprises erbium, neodymium or another rare earth metal.

43. (new) The method according to claim 42, wherein the dopant comprises aluminium, phosphorus, boron or fluorine.

44. (new) The method according to claim 38, wherein the temperature of the reactor ranges approximately from 1000 to 2000°C.

45. (new) A method for the preparation of doped oxide material from reactants, the method comprising:

bringing the reactants into a vaporous form by heating the reactants, the reactants comprising a base material and a dopant, the base material comprising an inorganic or organic compound of silicon or germanium and the dopant comprising a liquid solution of a rare earth metal;

mixing the reactants together to create a gas flow which has an advancing direction;

directing the gas flow to a de Laval nozzle; and

directing jets of at least one oxidative gas to the gas flow at a sufficiently high temperature in the de Laval nozzle in order to form substantially simultaneously oxidized silicon or germanium and oxidized rare earth metal, said jets being arranged to start from a wall of the de Laval nozzle and disposed at a periphery of the de Laval nozzle, said jets having a direction which is transverse in respect of the advancing direction of the gas flow.

46. (new) The method according to claim 45, wherein the gas flow of the reactants is expanded adiabatically.

47. (new) The method according to claim 45, wherein the oxidative gas is oxygen or carbon dioxide.

48. (new) The method according to claim 47, wherein the oxidative gas is directed to the gas flow as colder than said gas flow.

49. (new) The method according to claim 45, wherein the base material is silicon tetrachloride, germanium tetrachloride, tetraethylortosilicate, or tetraethoxygermanium.

50. (new) The method according to claim 45, wherein the dopant comprises erbium, neodymium or other rare earth metal.

51. (new) The method according to claim 51, wherein the dopant comprises aluminium, phosphorus, boron or fluorine.